**Course: 7th Grade Mathematics CCSS Standard Number(s): 7.NS.1ab, 7.NS.3 Day: 2**

**Unit # and Title: Unit One- Rational Number Operations Block(s)/Period(s): 1 2 3 4 5**

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| **Unit Essential Question(s):** | Where do we see rational numbers being used in our world? | | | |
| **Learning Target(s)**  **“I can statements”** | * I can use integer chips to model integer addition. | | | |
| **Essential Vocabulary** | Integer  Loss  Negative | | Positive  Profits  Sum  Zero pair (neutral pair) | |
| **Resources and Materials** | **Teacher** | | | **Student** |
| Holt Online Text: Hands-on Lab pg 50  Math’scool Dvd Lesson 3.2, subtopic 1  Integer Chips and Data Projector  or  LCD Projector and interactive integer chips | | | Math’scool Lesson 3.2 lesson notes  Integer Chips |
| **8 Mathematical Practices:** | | | | |
| 1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics. | | 5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | | |
| **Activating Strategy**  **(Opening Activity)** | To introduce students to adding integers, discuss examples of saving and spending. Ask students to explain how they would know whether they had total savings or total spending. Ask students to explain their methods for finding the total. | | | |
| **Cognitive Teaching Strategies**  **Me/We/Few/You**  **(TIP-Teacher input**  **SAP-Student actively participates**  **GP – Guided Practice**  **IP-Independent Practice)** | **Me/We/Few**  Play Math’scool DVD Lesson 3-2 through the end of subtopic 2. Model for students throughout the lesson:  Remind students that each yellow chip represents one positive integer and each red chip represents one negative integer.  **Integer Chips**  = 1  = -1  + = 0  When you model adding numbers with the same sign, you can count the total number of chips to find the sum.  *3+2=5*  *-3+(-2)=-5*  When you model adding numbers with different signs you **cannot** count the chips.  + = 2  + = -2  But…  + = 0  When you model adding positive and negative integers you must remove all the zero pairs. These pairs have a value of zero, so they do not affect the sum.  5+(-3)=2  *When do you think the sum would be positive?*  *When do you think the sum would be negative?*  Continue to ask students to model various integer sums.  You  Each student should complete the activity sheet independently. | | | |
| **Summarizing Strategy**  **(Closing Activity)** | Ask students to write rules for adding integers in their own words. Have them share with the class. | | | |
| **Assessment/Homework** | Students should write a summary of what they learned in the lesson in their journal.  Possible Journal Prompts:   * Describe a real-world situation in which integer addition is used such as changes in temperature, altitude, or stock prices. * Write a letter to someone who was absent from class today about what you learned. * Write a letter to your pet about what you learned today. | | | |
| **Extending/Refining** | Refining  Use integer chips to model several addition examples.  Extending  Create Magic Squares using integers. Switch puzzles with a classmate (page T-13, Big Ideas) | | | |